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display, said flat panel liquid-crystal display comprising:

backlight apparatus;

a first linear polarizer adjacent said backlight apparatus;

a first positive uniaxial retardation film adjacent said first linear polarizer;

a first negative retardation film adjacent said first positive uniaxial retardation film;

a first orientation film adjacent said first negative retardation film;

a liquid-crystal layer adjacent said first orientation film;

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a second orientation film adjacent said liquid-crystal layer;

a second negative retardation film adjacent said second orientation film;

a second positive uniaxial retardation film adjacent said second negative retardation film;

a second linear polarizer adjacent said second positive uniaxial retardation film;

a first glass substrate being disposed between said first orientation film and said first negative retardation film;

a second glass substrate being disposed between said second orientation film and said second negative retardation film;

a first electrode being disposed between said first glass

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substrate and said first orientation film; and

a second electrode being disposed between said second glass substrates and said second orientation film;

said first and said second glass substrates comprising:

an alkali-free aluminoborosilicate glass;

said glass having a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8 x 10^{-6}/K and 3.8 x 10^{-6}/K;

said glass having the composition (in % by weight, based on oxide):

SiO_2	> 58 - 65
B_2O_3	> 6 - 11.5
Al_2O_3	> 21 - 25
MgO	4 - 8
CaO	0 - 8
SrO	2.6 - < 8
BaO	0 - < 0.5
ZnO	0 - 2;

said glass being configured to be resistant to thermal shock;

said glass being configured to having a high transparency over a broad spectral range in the visible and ultra violet ranges; and

said glass being configured to be free of bubbles,

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knots, inclusions, streaks, and surface undulations.--

--42. The flat panel liquid-crystal display according to claim 41, wherein:

said glass comprises at least one of (a.), (b.), (c.), (d.), (e.), and (f.), where (a.), (b.), (c.), (d.), (e.), and (f.) are:

(a.) more than 8% by weight of B_2O_3;

(b.) one of: more than 18% by weight of Al_2O_3, at least 20.5% by weight of Al_2O_3, and at least 21% by weight of Al_2O_3;

(c.) additionally (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5
Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5
Cl^-	0 - 1.5
F^-	0 - 1.5
SO_4^{2-}	0 - 1.5
with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$ + $Cl^- + F^- + SO_4^{2-}$	0 - 1.5;

(d.) a glass in which arsenic oxide, antimony oxide, and

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inherent impurities are minimized;

(e.) a float glass; and

(f.) one of (i.), (ii.), and (iii.):

(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8 x 10^{-6}/K to 3.6 x 10^{-6}/K;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

--43. The flat panel liquid-crystal display according to claim 41, wherein:

said glass comprises (a.), (b.), (c.), (d.), (e.), and (f.), where (a.), (b.), (c.), (d.), (e.), and (f.) are:

(a.) more than 8% by weight of B_2O_3;

(b.) one of: more than 18% by weight of Al_2O_3, at least 20.5% by weight of Al_2O_3, and at least 21% by weight of Al_2O_3;

(c.) additionally (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5
Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5

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Cl^- 0 - 1.5

F^- 0 - 1.5

SO_4^{2-} 0 - 1.5

with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$

$+ Cl^- + F^- + SO_4^{2-}$ 0 - 1.5;

(d.) a glass in which arsenic oxide, antimony oxide, and inherent impurities are minimized;

(e.) a float glass; and

(f.) one of (i.), (ii.), and (iii.):

(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between $2.8 \times 10^{-6}/K$ to $3.6 \times 10^{-6}/K$;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

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--44. A glass substrate for a flat panel liquid-crystal display, such as for a laptop computer, the flat panel liquid-display including a twisted nematic display, a supertwisted nematic display, an active matrix liquid-crystal display, a thin film transistor display, and a plasma addressed liquid-crystal display, said substrate comprising:

an alkali-free aluminoborosilicate glass;

said glass having a coefficient of thermal expansion $\alpha_{20/300}$ of between $2.8 \times 10^{-6}/K$ and $3.8 \times 10^{-6}/K$;

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said glass having the composition (in % by weight, based on oxide):

SiO_2	> 58 - 65
B_2O_3	> 6 - 11.5
Al_2O_3	> 14 - 25
MgO	4 - 8
CaO	0 - < 2
SrO	> 0.5 - < 4
BaO	0 - < 0.5
ZnO	0 - 2;

said glass being configured to be resistant to thermal shock;

said glass being configured to have a high transparency over a broad spectral range in the visible and ultra violet ranges; and

said glass being configured to be free of bubbles, knots, inclusions, streaks, and surface undulations.--

--45. The glass substrate according to claim 44, wherein:

said glass comprises at least one of (a.), (b.), (c.), (d.), (e.), and (f.), where (a.), (b.), (c.), (d.), (e.), and (f.) are:

(a.) more than 8% by weight of B_2O_3;

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(b.) one of: more than 18% by weight of Al_2O_3, at least 20.5% by weight of Al_2O_3, and at least 21% by weight of Al_2O_3;

(c.) additionally (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5
Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5
Cl^-	0 - 1.5
F^-	0 - 1.5
SO_4^{2-}	0 - 1.5
with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$ + $Cl^- + F^- + SO_4^{2-}$	0 - 1.5;

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(d.) a glass in which arsenic oxide, antimony oxide, and inherent impurities are minimized;

(e.) a float glass; and

(f.) one of (i.), (ii.), and (iii.):

(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between $2.8 \times 10^{-6}/K$ to $3.6 \times 10^{-6}/K$;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

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--46. The glass substrate according to claim 44, wherein:

said glass comprises (a.), (b.), (c.), (d.), (e.), and (f.), where (a.), (b.), (c.), (d.), (e.), and (f.) are:

(a.) more than 8% by weight of B_2O_3;

(b.) one of: more than 18% by weight of Al_2O_3, at least 20.5% by weight of Al_2O_3, and at least 21% by weight of Al_2O_3;

(c.) additionally (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5
Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5
Cl^-	0 - 1.5
F^-	0 - 1.5
SO_4^{2-}	0 - 1.5
with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$ + $Cl^- + F^- + SO_4^{2-}$	0 - 1.5;

(d.) a glass in which arsenic oxide, antimony oxide, and inherent impurities are minimized;

(e.) a float glass; and

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(f.) one of (i.), (ii.), and (iii.):

(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8×10^{-6}/K to 3.6×10^{-6}/K;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

--47. A glass comprising:

a substantially alkali-free aluminoborosilicate glass;

said glass having a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8×10^{-6}/K and 3.8×10^{-6}/K;

said glass having the composition (in % by weight, based on oxide):

SiO_2	> 58 - 65
B_2O_3	> 6 - 11.5
Al_2O_3	> 14 - 25
MgO	4 - 8
CaO	0 - 8
SrO	2.6 - < 4
BaO	0 - < 0.5
with SrO + BaO	> 3
ZnO	0 - 2.--

--48. The glass according to claim 47, wherein:

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said glass is configured to be resistant to thermal shock;

said glass is configured to have a high transparency over a broad spectral range in the visible and ultra violet ranges; and

said glass is configured to be free of bubbles, knots, inclusions, streaks, and surface undulations.--

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--49. The glass according to claim 48, wherein:
said glass comprises more than 8% by weight of B_2O_3.--

--50. The glass according to claim 49, wherein:
said glass comprises one of (i.) and (ii.):
(i.) more than 18% by weight of Al_2O_3; and
(ii.) at least 20.5% by weight of Al_2O_3.--

--51. The glass according to claim 50, wherein said glass comprises at least 21.5% by weight of Al_2O_3.--

--52. The glass according to claim 51, wherein:
said glass additionally comprises (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5

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Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5
Cl^-	0 - 1.5
F^-	0 - 1.5
SO_4^{2-}	0 - 1.5; and
with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$ + $Cl^- + F^- + SO_4^{2-}$	0 - 1.5.--

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--53. The glass according to claim 52, wherein: said glass comprises a glass in which arsenic oxide, antimony oxide, and inherent impurities are minimized.--

--54. The glass according to claim 53, wherein: said glass comprises a float glass.--

--55. The glass according to claim 54, wherein: said glass has one of (i.), (ii.), and (iii.):

(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8 x 10^{-6}/K to 3.6 x 10^{-6}/K;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

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--56. The glass according to claim 47, wherein:

said glass comprises at least one of (a.), (b.), (c.), (d.), (e.), and (f.), where (a.), (b.), (c.), (d.), (e.), and (f.) are:

(a.) more than 8% by weight of B_2O_3;

(b.) one of: more than 18% by weight of Al_2O_3, at least 20.5% by weight of Al_2O_3, and at least 21% by weight of Al_2O_3;

(c.) additionally (in % by weight):

ZrO_2	0 - 2
TiO_2	0 - 2
with $ZrO_2 + TiO_2$	0 - 2
As_2O_3	0 - 1.5
Sb_2O_3	0 - 1.5
SnO_2	0 - 1.5
CeO_2	0 - 1.5
Cl^-	0 - 1.5
F^-	0 - 1.5
SO_4^{2-}	0 - 1.5
with $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2$ + $Cl^- + F^- + SO_4^{2-}$	0 - 1.5;

(d.) a glass in which arsenic oxide, antimony oxide, and inherent impurities are minimized;

(e.) a float glass; and

(f.) one of (i.), (ii.), and (iii.):

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(i.) a coefficient of thermal expansion $\alpha_{20/300}$ of between 2.8 x 10^{-6}/K to 3.6 x 10^{-6}/K;

(ii.) a glass transition temperature T_g of > 700°C; and

(iii.) a density ρ of < 2.600 g/cm^3.--

--57. The glass according to claim 47, wherein:

said glass is configured as a glass substrate in combination in or with a flat panel liquid-crystal display, such as for a laptop computer, the flat panel liquid-crystal display including a twisted nematic display, a supertwisted nematic display, an active matrix liquid-crystal display, a thin film transistor display, and a plasma addressed liquid-crystal display.--

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--58. The glass according to claim 57, wherein:

said flat panel liquid-crystal display comprises:

backlight apparatus;

a first linear polarizer adjacent said backlight apparatus;

a first positive uniaxial retardation film adjacent said first linear polarizer;

a first negative retardation film adjacent said first positive uniaxial retardation film;

a first orientation film adjacent said first negative retardation film;

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a liquid-crystal layer adjacent said first orientation film;

a second orientation film adjacent said liquid-crystal layer;

a second negative retardation film adjacent said second orientation film;

a second positive uniaxial retardation film adjacent said second negative retardation film;

a second linear polarizer adjacent said second negative retardation film;

said glass substrate comprising a first glass substrate;

said first glass substrate being disposed between said first orientation film and said first negative retardation film;

said glass substrate comprising a second glass substrate;

said second glass substrate being disposed between said second orientation film and said second negative retardation film;

a first electrode being disposed between said first glass substrate and said first orientation film; and

a second electrode being disposed between said second glass substrate and said second orientation film.--

--59. The glass according to claim 47, wherein:

said glass is configured as a glass substrate in combination